WIRE BONDED MICROELECTRONIC DEVICE ASSEMBLIES AND METHODS OF MANUFACTURING SAME

ABSTRACT OF THE DISCLOSURE

Aspects of the invention provide microelectronic device assemblies including microelectronic components wire bonded to substrates, and methods of forming such assemblies. In one embodiment of the invention, a microelectronic component includes a plurality of multi-layered bond pads. Each of the multi-layered bond pads includes a bond pad base (which may comprise aluminum), an outer bond layer (which may comprise gold), and an intermediate layer between the bond pad base and the outer bond layer. This microelectronic component may be wire bonded to a substrate, with the outer bond layer and the bonding wire both comprising the same metal (e.g., gold). The bonding wire may be reliably stitch bonded to the outer bond layer of the multi-layered bond pads, facilitating manufacture of low profile microelectronic device assemblies.